



Louisville Metro Air Pollution Control District
850 Barret Avenue
Louisville, Kentucky 40204-1745



Permit No.: 36880-13-C

Plant ID 34

Effective Date: xx/xx/2013

Expiration Date: xx/xx/2014

Permit Fee \$ x.xx

Caldwell Tanks, Incorporated
4000 Tower Road
Louisville, KY 40219

is authorized to construct the described process equipment by the Louisville Metro Air Pollution Control District. Authorization is based on information provided with the application submitted by the company and in accordance with applicable regulations and the conditions specified herein.

Process equipment description:

One (1) plasma cutting machine (Manufacturer: TBD, Model: Custom) used to cut steel to plan consisting of: one (1) cutting table, one (1) plasma cutting unit, one (1) slagger table, and one (1) dust collector using cartridge filters.

Applicable Regulation(s): 2.03, 2.04, 2.05, 2.16, 5.00, 5.01, 5.21, 5.23, 7.08

Choose reference(s): N/A

Application No. DM 53664

Application Received 1/29/2013

Permit Writer: Narathip Chitradon

{Manager1}
Air Pollution Control Officer
{date1}

Date of Final Draft xx/xx/2013

This permit covers only the provisions of Kentucky Revised Statutes Chapter 77 Air Pollution Control, the regulations of the Louisville Metro Air Pollution Control District (District) and, where appropriate, certain federal regulations. The issuance of this permit does not exempt any owner or operator to whom it has been issued from prosecution on account of the emission or issuance of any air contaminant caused or permitted by such owner or operator in violation of any of the provisions of KRS 77 or District regulations. Any permit shall be considered invalid if timely payment of applicable fees is not made after receipt of the statement of fees (SOF). The permit contains general permit conditions and specific permit conditions. General conditions are applicable unless a more stringent requirement is specified elsewhere in the permit.

General Conditions

- G1. The owner or operator of the affected facility covered by this permit shall notify the District of any process change, equipment change, material change, or change in method or hours of operation. This requirement is applicable to those changes that may have the potential for increasing the emission of air contaminants to a level in excess of the applicable limits or standards specified in this permit or District regulations.
- G2. The owner or operator shall obtain new or revised permits from the District when:
(See [District Regulation 2.16](#) for Title V sources. See [District Regulation 2.17](#) for FEDOOP sources. See [District Regulation 2.03](#) for other sources.)
- a. The company relocates to a different physical address.
 - b. The ownership of the company is changed.
 - c. The name of the company as shown on the permit is changed.
 - d. Permits are nearing expiration or have expired.
- G3. The owner or operator shall submit a timely application for changes according to G2. For minor sources only, the District does not require application for permit renewal. The District automatically commences the process of permit renewal for minor sources upon expiration. Timely renewal is not always achievable; therefore, the company is hereby authorized to continue operation in compliance with the latest District permit(s) until the District issues the renewed permit(s).
- G4. The owner or operator shall not be authorized to transfer ownership or responsibility of the permit. The District may transfer permits after appropriate notification (Form 100A) has been received and review has been made.
- G5. The owner or operator shall pay the required permit fees within 45 days after issuance of the SOF by the District, unless other arrangements have been proposed and accepted by the District.
- G6. This permit allows operation 8,760 hours per year unless specifically limited elsewhere in this permit.

- G7. The owner or operator shall submit emission inventory reports as required by [Regulation 1.06](#).
- G8. The owner or operator shall timely report abnormal conditions or operational changes, which may cause excess emissions as required by [Regulation 1.07](#).
- G9. Unless specified elsewhere in this permit, the owner or operator shall complete required monthly record keeping within 30 days following the end of each calendar month.
- G10. If a change in the "Responsible Official" (RO) occurs during the term of this permit, the owner or operator shall provide written notification (Form 100A) to the District within 30 calendar days of the date the RO change occurs.

Specific Conditions

S1. Standards (Regulation 2.03, section 5.1)

a. PM/PM₁₀/PM_{2.5}

- i. The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr for the plasma cutting machine. (Regulation 7.08, section 3.1.2) (See [Comment 1](#))
- ii. The owner or operator shall utilize the dust collector at all times the process equipment is in operation and shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (Regulation 2.03, section 5.1)
- iii. The owner or operator shall limit the PM₁₀ and PM_{2.5} emissions to less than 15, and 10 tons, respectively, per 12 consecutive month period. (Regulation 2.04, section 1 and Regulation 2.05, section 1) (See [Comment 2](#))

b. Opacity

The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. (Regulation 7.08, section 3.1.1)

c. NO_x

The owner or operator shall not cause to be discharged into the atmosphere from any affected facility or from any air pollution control equipment installed on any affected facility any NO_x fumes in excess of 300 ppm by volume expressed as NO₂. (Regulation 7.08, section 4) (See [Comment 3](#))

d. TAC

- i. The total time that the plasma cutting machine can operate must not exceed 6,100 hours per 12 consecutive month period. (Regulation 5.21, section 3.1)
- ii. The owner or operator shall utilize the dust collector at all times the process equipment is in operation and shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (Regulation 2.03, section 5.1)
- iii. The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established

by modeling or determined by the District to be de minimis. (Regulations 5.01 and 5.21)

S2. Monitoring and Record Keeping (Regulation 2.03, section 5.1)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. PM/PM₁₀/PM_{2.5}

- i. The owner or operator shall, monthly, perform a visual inspection of the structural and mechanical integrity of the dust collector for signs of damage, air leakage, corrosion, etc. and repair as needed. The owner or operator shall keep records, monthly, of the visual inspection of the structural and mechanical integrity of the dust collector.
- ii. The owner or operator shall maintain daily records of any periods of time where the process was operating and the control device was not operating. The records shall include:
 - 1) Date;
 - 2) Start time and stop time;
 - 3) Identification of the control device and process equipment;
 - 4) Emissions during the bypass;
 - 5) Monthly and 12 consecutive month PM/PM₁₀/PM_{2.5} emissions;
 - 6) Summary of the cause or reason for each bypass event;
 - 7) Corrective action taken to minimize the extent or duration of the bypass event; and
 - 8) Measures implemented to prevent reoccurrence of the situation that resulted in the bypass event.
- iii. The owner or operator shall maintain monthly records of monthly and 12 consecutive month PM₁₀/PM_{2.5} emissions.

b. Opacity

- i. The owner or operator shall conduct a monthly one-minute visible emissions survey, during normal operation and daylight hours, of the emission points. No more than four emission points shall be observed simultaneously. The opacity surveys can be performed on the building exhaust points if the process is inside an enclosure.
- ii. At emission points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9, in accordance with 40 CFR Part 60, Appendix A, within 24 hours of the initial observation.

- iii. The owner or operator shall maintain records, monthly, of the results of all visible emissions surveys and tests. Records of the results of any visible emissions survey shall include the date of the survey, the name of the person conducting the survey, whether or not visible emissions were observed, and what if any corrective action was performed. If an emission point is not being operated during a given month, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record.
- c. **NO_x**

There are no routine monitoring and recordkeeping requirements. (See [Comment 3](#))
- d. **TAC**
 - i. The owner or operator shall maintain records, daily, of the hours of operation for the plasma cutting unit. The owner or operator shall also maintain records, monthly, of the 12 consecutive month hours of operation.
 - ii. The owner or operator shall inspect the filters in the dust collector at least monthly to ensure proper installment (i.e. proper alignment/placement, gaps, etc.) and replace as needed. The owner or operator shall keep a record that shows the date and the name of the person who inspected the filters and if filters were replaced.
 - iii. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results.
 - iv. The owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions if a new TAC is introduced or the content of a TAC in a raw material increases.

S3. Reporting (Regulation 2.03, section 5.1)

The owner or operator shall submit semi-annual compliance reports that include the information in this section. All reports shall include the company name, plant ID number, and the beginning and ending date of the reporting period. The compliance reports shall clearly identify any deviation from a permit requirement. The compliance reports shall be postmarked within 60 days following the end of each reporting period. All compliance reports shall include the following certification statement per Regulation 2.16, section 3.5.11.

- “Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete”.
- Signature and title of the responsible official of the company.

The compliance reports are due on or before the following dates of each calendar year:

<u>Reporting Period</u>	<u>Report Due Date</u>
January 1 st through June 30 th	August 29 th
July 1 st through December 31 st	March 1 st

a. **PM/PM₁₀/PM_{2.5}**

- i. The owner or operator shall identify any periods of failure to perform a visual inspection of the structural and mechanical integrity of the dust collector.
- ii. The owner or operator shall report monthly and 12 consecutive month PM₁₀/PM_{2.5} emissions.
- iii. The owner or operator shall identify all periods of bypassing the dust collector when the process was in operation during a reporting period. The semiannual compliance report shall include the date, duration (including start and stop time) of each bypass event, the total PM/PM₁₀/PM_{2.5} emissions during each bypass event, summary information on the cause or reason for each bypass event, corrective action taken to minimize the extent and duration of each bypass event, and measures implemented to prevent reoccurrence of the situation that resulted in bypassing the dust collector. If there were no periods of bypassing the dust collector during a reporting period, the semiannual compliance report must include a statement that there were no periods of bypassing the dust collector during the reporting period.

b. **Opacity**

- i. The owner or operator shall identify any periods of failure to perform the visible emission survey.
- ii. The owner or operator shall submit results of any Method 9 tests performed, and description of any corrective action taken. If there were no visible emissions observed during a reporting period, the semiannual compliance report must include a statement to that effect.

c. **NO_x**

There are no routine reporting requirements. (See [Comment 3](#))

d. **TAC**

- i. The owner or operator shall identify any exceedances of the hours of operation standard.
- ii. The owner or operator shall identify any missed filter inspections and a description of any corrective action taken.

- iii. The owner or operator shall report any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration or a negative declaration stating that operations were within the conditions analyzed. This includes, but is not limited to, control device upset conditions.
- iv. For any conditions outside the analysis, the owner or operator shall re-analyze to determine whether these conditions comply with the STAR program. Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze. (Regulation 5.21 sections 4.22 – 4.24).
- v. The owner or operator shall submit the re-evaluated EA demonstration to the District within 6 months of a change of a raw material as described in [S2.d.iv.](#)

Comments

- 1. The District has performed a one-time PM compliance demonstration for this equipment on 2/27/2013, and the lb/hr standard cannot be exceeded controlled.
- 2. The only pollutants over the PSD limit are PM₁₀ and PM_{2.5}. The 15 and 10 ton per year emission limits for PM₁₀ and PM_{2.5} were taken to avoid District Regulations 2.04 *Construction or Modification of major Sources In or Impacting Upon Non-Attainment Areas* (for PM_{2.5}) and 2.05 *Prevention of Significant Deterioration of Air Quality* (PM₁₀). The uncontrolled PM and NO_x, potential emissions are under the PSD threshold.
- 3. The District has performed a one-time NO_x compliance demonstration for this equipment on 2/27/2013, and the 300 ppm emission standard cannot be exceeded.
- 4. The construction permit contains the following insignificant activities: one (1) submerged arc plate seamer and three (3) stations for manual welding
- 5. The construction permit fees are based on PSD/NSR avoidance in accordance with Regulation 2.08, section 2.5.1.1.